

## ***2002 Tactical Wheeled Vehicle Conference***

*28 January 2002*



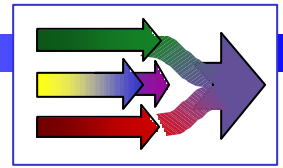
***LTG Charles S. Mahan Jr.***

*United States Army*

*Deputy Chief of Staff, G-4*

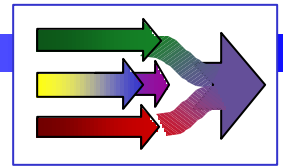


***Sustaining The Transforming Army***



# ***AGENDA***

- ❖ **TRANSFORMATION CHARTER**
- ❖ **CURRENT OPERATIONAL ENVIRONMENT**
- ❖ **CURRENT ENABLERS**
- ❖ **FUTURE OPERATIONAL ENVIRONMENT**
- ❖ **FUTURE CAPABILITIES**
- ❖ **SUMMARY**



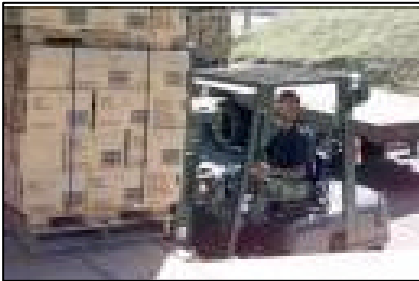
# TRANSFORMATION CHARTER

★ **Enhance strategic responsiveness –**  
*meet deployment timelines*

✓ Improve Deployment Automation

## DEPLOYMENT TIMELINE:

- ✓ 1 BDE in 96 hrs
- ✓ 1 DIV in 120 hrs
- ✓ 5 DIVs in 30 days



★ **Reduce combat zone CS/CSS footprint**

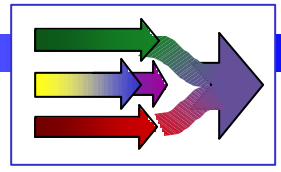
- ✓ Exploit Advanced Technology (Fuel Efficiency, GPS)
- ✓ Common Platforms
- ✓ Multimodal Platforms

★ **Reduce cost of logistics without**  
**reducing warfighting capability or**  
**readiness**

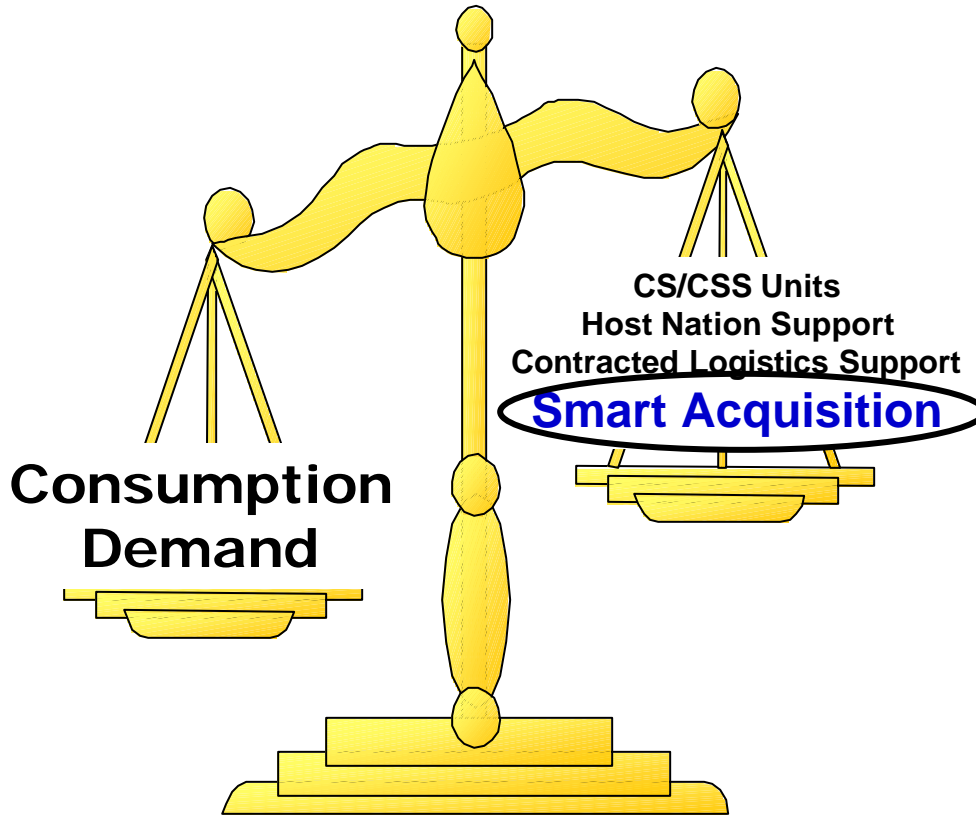
- ✓ Balance acquisition and sustainment
- ✓ Embedded Diagnostics/Prognostics



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# TRANSFORMATION'S INFLUENCE ON ACQUISITION



## *Desired characteristics*

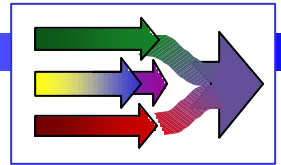
- \* Increased efficiency
- \* Increased reliability
- \* Technology to reduce weight and consumption
- \* Technology insertion to enhance performance
- \* Increased lethality
- \* Increased survivability
- \* Transportability

Smart acquisition practices will result in substantial reductions in CSS footprint, demand and cost....and help us meet our transformation goals.

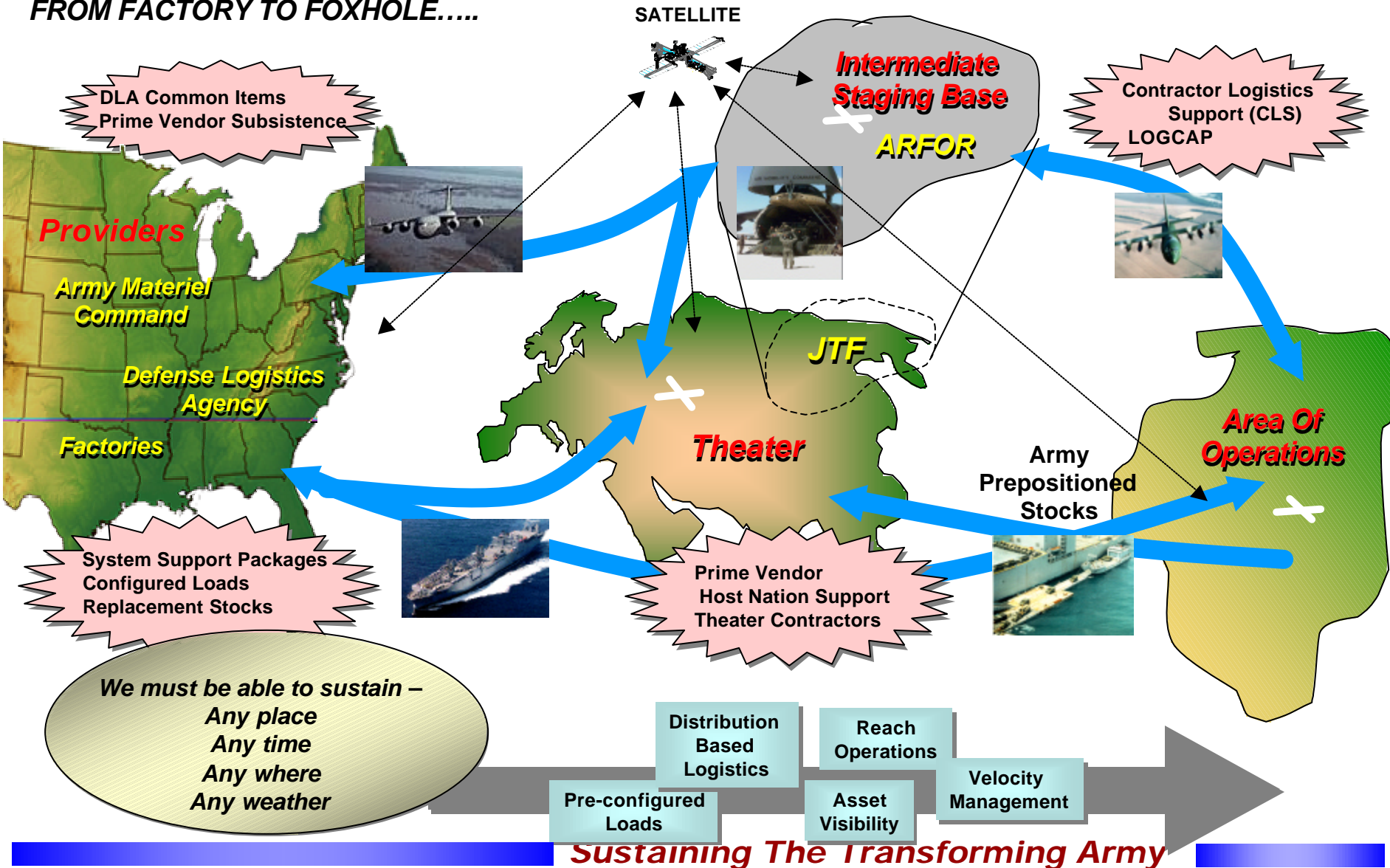


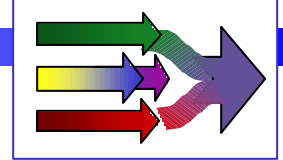


# GLOBAL SUSTAINMENT



FROM FACTORY TO FOXHOLE.....





# CURRENT ENABLERS

*We have developed technologies to exploit reach-back  
and that facilitate split-based operations*

## Total Asset Visibility / Automatic Identification Technology

*Data capture--identify,  
location, quantity*



## Driver's Vision Enhancer



## Container Roll-In / Roll-Out Platform (CROP)



*Reduces cargo trans-shipping time  
Eliminates blocking & bracing*

## Palletized Loading System



*Enhances battlefield distribution,  
strategically configured loads*

## Diagnostics Prognostics REDI-PRO



*Predicts weapon system failures  
Optimizes operational readiness*

## Fwd Repair System - Heavy



*Self-contained maintenance  
and repair capability*

## Transportation Coordinator's Automated Information for Movements System (TCAIMS II)



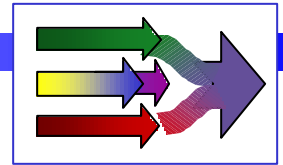
*Enhances In-theater transportation and distribution*

## Movement Tracking System

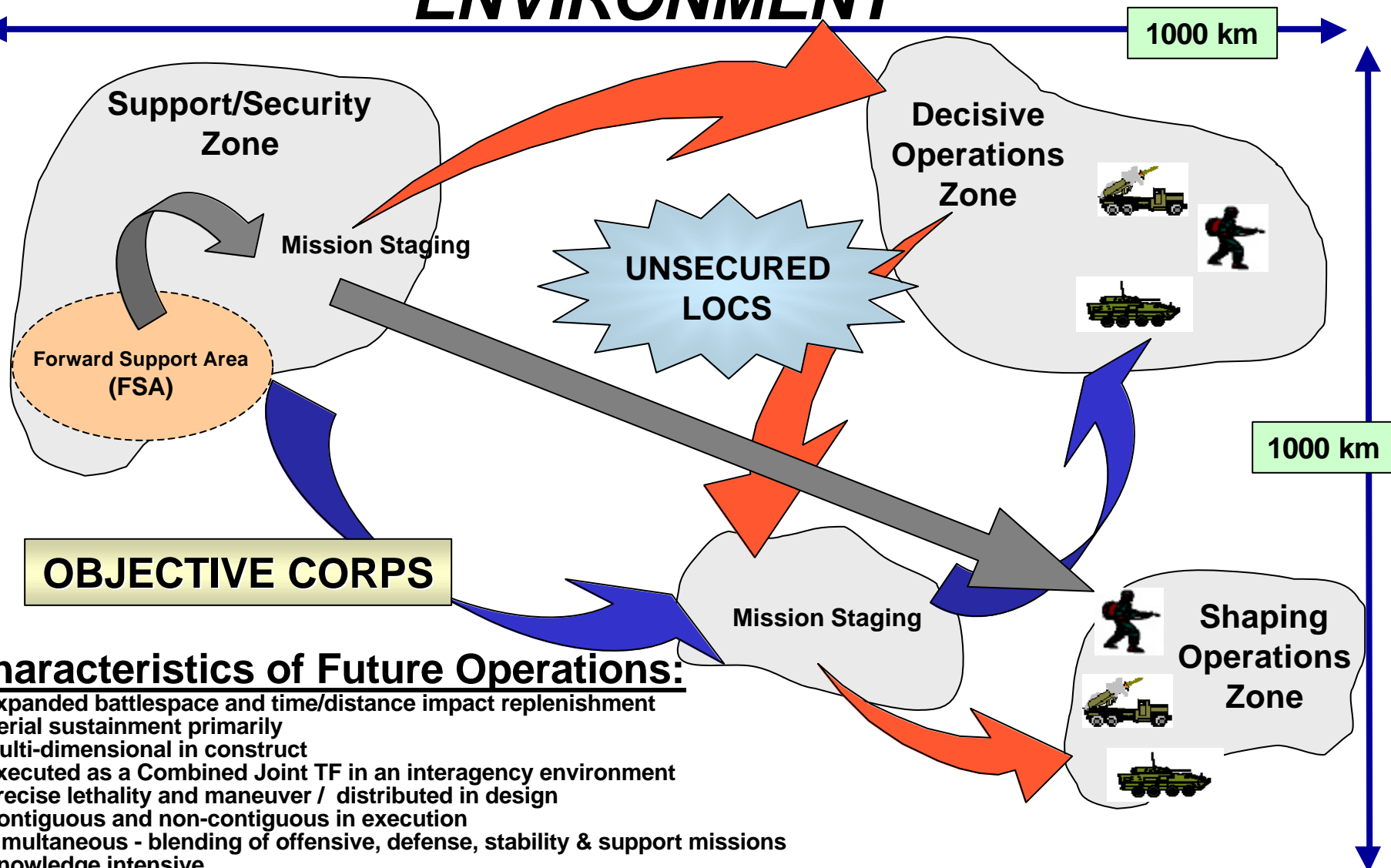


*Enhances theater in-transit visibility*

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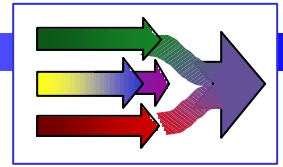
# ***FUTURE OPERATING ENVIRONMENT***



## **Characteristics of Future Operations:**

- Expanded battlespace and time/distance impact replenishment
- Aerial sustainment primarily
- Multi-dimensional in construct
- Executed as a Combined Joint TF in an interagency environment
- Precise lethality and maneuver / distributed in design
- Contiguous and non-contiguous in execution
- Simultaneous - blending of offensive, defense, stability & support missions
- Knowledge intensive

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# ***LOGISTICS IN THE FUTURE ENVIRONMENT***

## **DESIRED CHARACTERISTICS:**

### **Pre-Configured Loads**

Tailored  
Prepared at factory / warehouse  
Multi-modal w/o reconfiguration

### **Reach Operations**

Leveraged to reduce logistics footprint in theater  
Requires assured communications  
Minimal port requirement

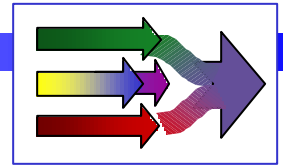
### **Distribution-Based Logistics**

Maximizes velocity  
Limit/eliminate Materiel Handling Equipment  
Common delivery platform

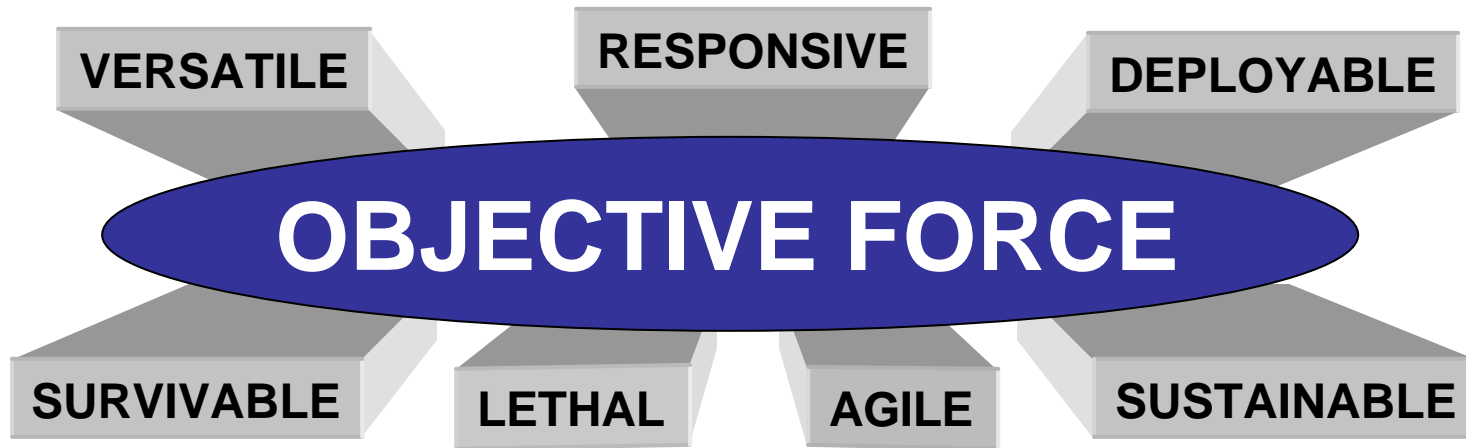
### **Asset Visibility**

Real-time information  
From factory to foxhole

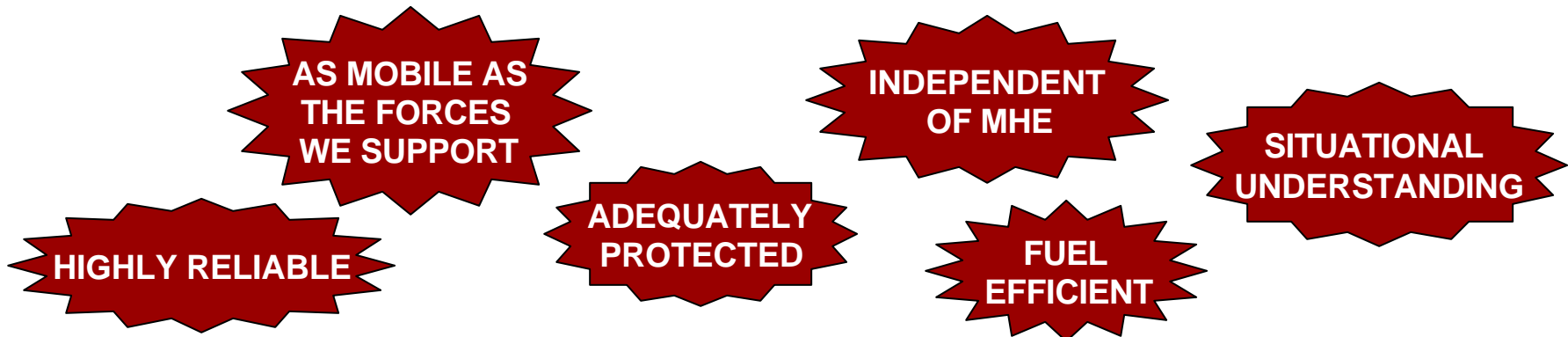


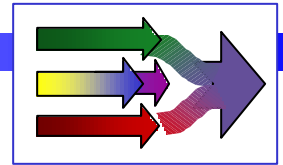


# ***VEHICLES TO SUPPORT FUTURE LOGISTICS***

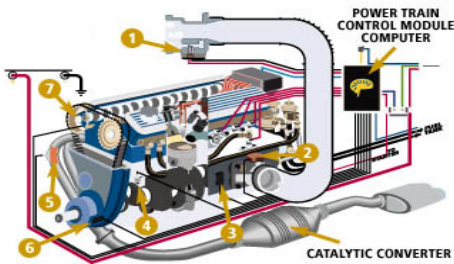


**Future vehicles must share the same characteristics as the Objective Force and specifically be.....**





# ***FUTURE VEHICLE CAPABILITIES***



**Perpetual Test Embedded  
Diagnostics/Prognostics**



**GPS**



**Petroleum, Oil & Lubricant  
(POL) Sensor**



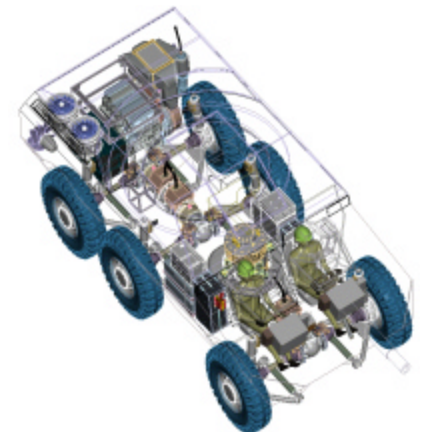
**Driver's Vision  
Enhancer**

- ✓ Reduced preventive maintenance requirement
- ✓ Reduced maintenance time
- ✓ No external Test, Measuring and Diagnostic Equipment (TMDE)
- ✓ No special tools
- ✓ Better embedded diagnostics, prognostics

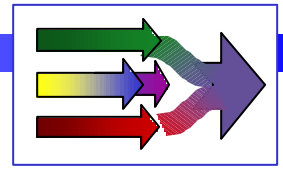


**Smart Battery**

**Platform Design**  
**Modular Components**  
**Intelligent Components**  
**Common Components**



**Hybrid Electric Engine**



# ***WHAT YOU CAN DO FOR US***

- ❖ **Increase reliability / fuel efficiency**
- ❖ **Emphasize sustainability**
- ❖ **Leverage diagnostics and prognostics**
- ❖ **Design / build for multi-modal configurations**
- ❖ **Continue strong industry partnerships**

**Industry Partnership Benefits DOD**